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(54) **COMPOSITIONS AND METHODS FOR
SILENCING EBOLA VIRUS GENE
EXPRESSION**

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(58) **Field of Classification Search**
None
See application file for complete search history.

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(57) **ABSTRACT**

The present invention provides compositions comprising therapeutic nucleic acids (e.g., interfering RNA such as siRNA) that target Ebola virus (EBOV) gene expression and methods of using such compositions to silence EBOV gene expression. More particularly, the invention provides unmodified and chemically modified interfering RNA which silence EBOV gene expression and methods of use thereof, e.g., for preventing or treating EBOV infections caused by one or more EBOV species such as Zaire EBOV. The invention also provides serum-stable nucleic acid-lipid particles comprising one or more interfering RNA molecules, a cationic lipid, and a non-cationic lipid, which can further comprise a conjugated lipid that inhibits aggregation of particles. Methods of silencing EBOV gene expression by administering one or more interfering RNA molecules to a mammalian subject are also provided.

20 Claims, 8 Drawing Sheets